



# Hurricane Thompson Briefing # 4

5 AM - Sunday September 4, 2022

What has changed: Hurricane and Storm Surge Watches  
upgraded to Warnings. Earlier onset of impacts.

**\*\*\*\* EXERCISE EXERCISE EXERCISE \*\*\*\***



# Situation Overview

## Hurricane Thompson

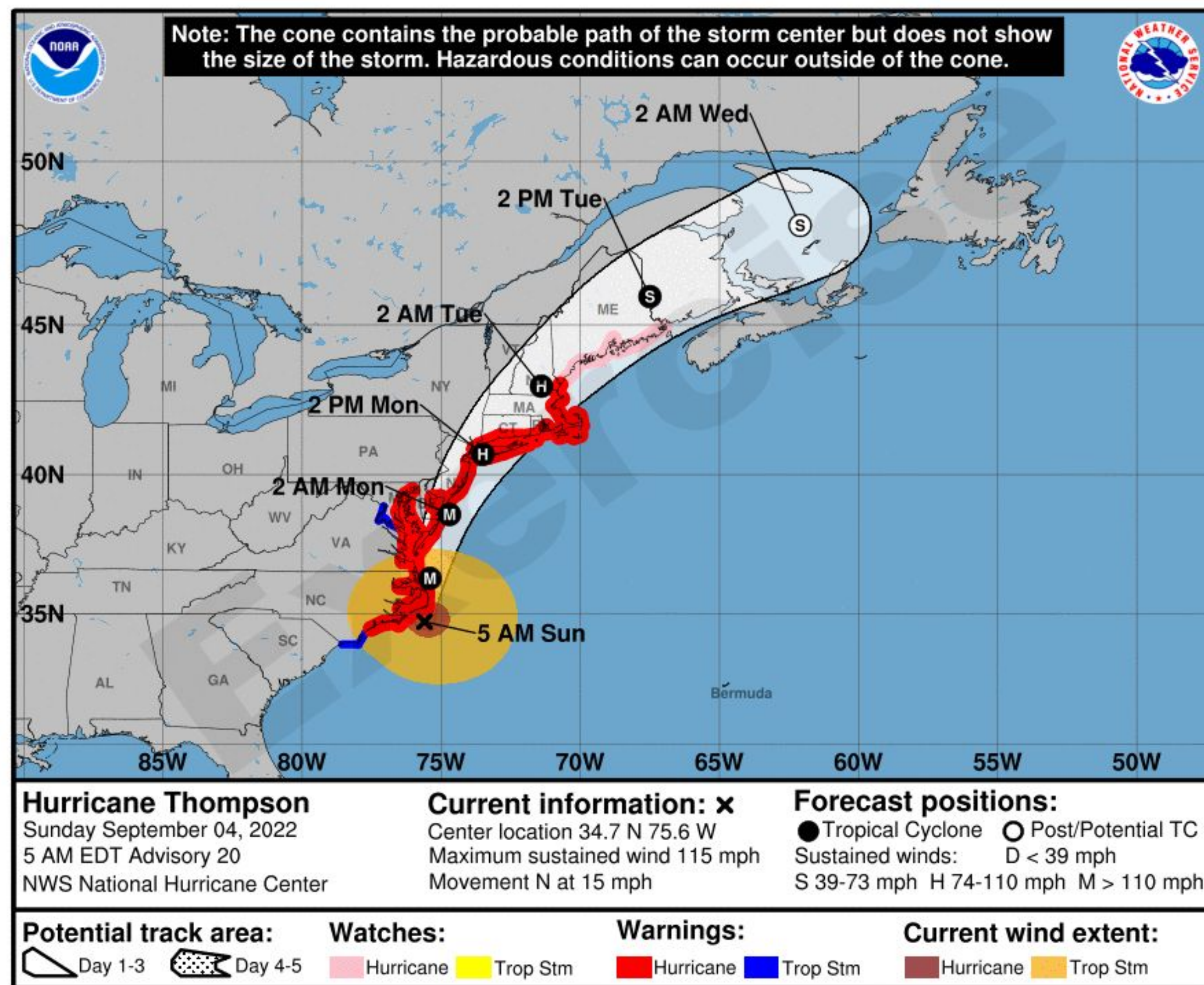
- Hurricane Thompson remains a dangerous CAT 3 (111-129 mph) hurricane expected to make landfall across western Long Island as a CAT 2 (96-110 mph) hurricane by Monday evening.
- Destructive winds, life threatening storm surge inundation and severe flood impacts are expected.
- Hurricane conditions will spread north across CT/RI and MA during Monday afternoon, peaking late Monday/Monday evening.





# Situation Overview

## Hurricane Thompson



- Hurricane Warnings and Storm Surge Warnings in effect for the entire coastline.
- Hurricane conditions begin Monday afternoon.
- Track has shifted slightly east along with an increase in forward speed. If this trend continues, Hurricane Thompson could make landfall as a CAT 3 hurricane with even greater impacts on a scale not seen here since 1954 (Carol)
- As a reminder, do not focus on the center of the cone. Thompson has continued to trend eastward of the initial forecast track.

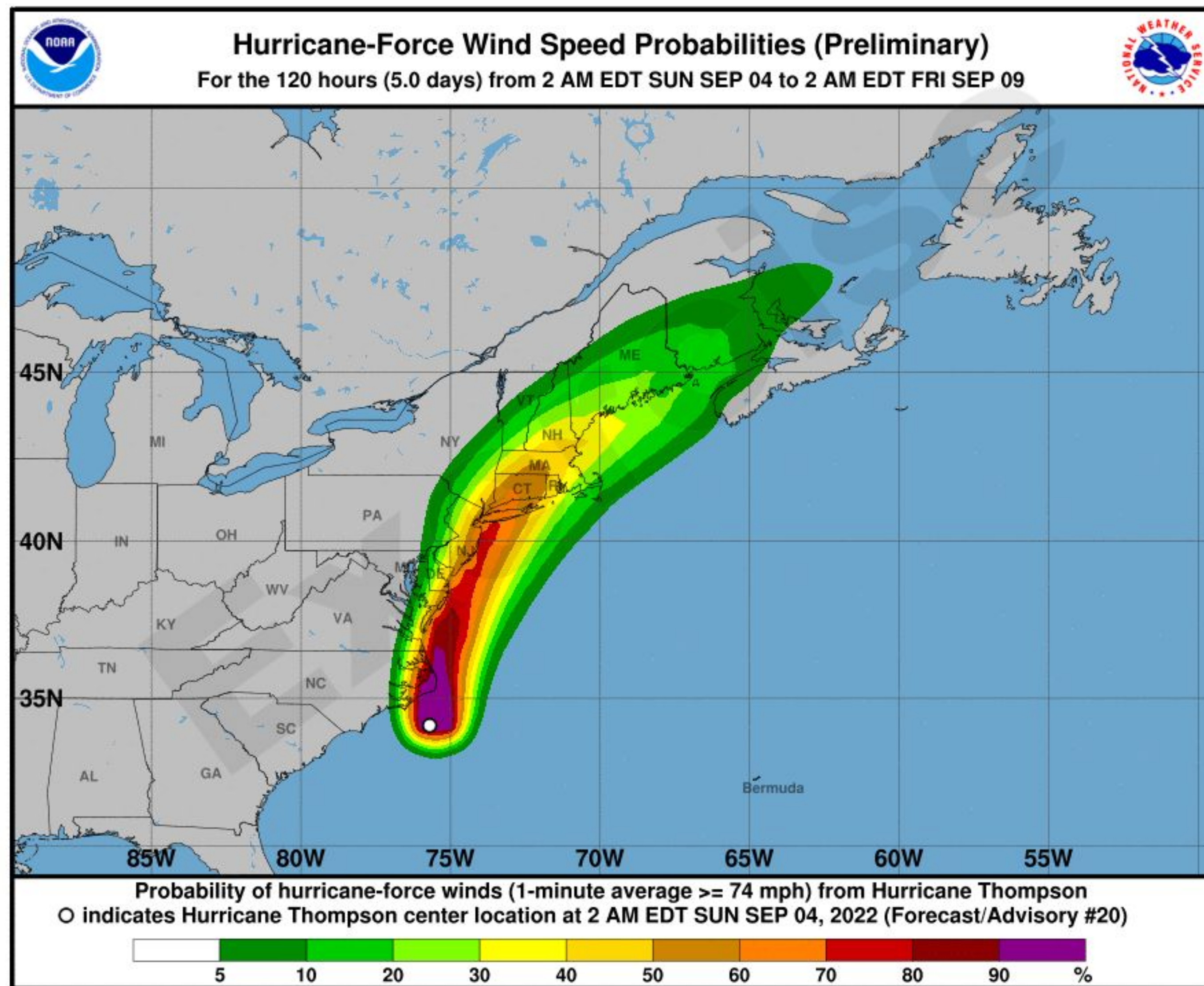
**NOTE:** Do not focus on the exact track.  
Impacts can occur well outside the area enclosed by the cone.





# Hurricane Wind Speed Probabilities

Hurricane Thompson



- Hurricane wind probabilities have increased.
- Greatest risk for hurricane force winds across Connecticut where sustained wind speeds up to 110 mph possible along the coast.
- Hurricane conditions could begin as early as Monday afternoon.
- Axis of strongest winds could shift east into RI and SE MA if current trends continue.

\*\*\*\* EXERCISE EXERCISE EXERCISE \*\*\*\*

National Weather Service Boston/Norton MA



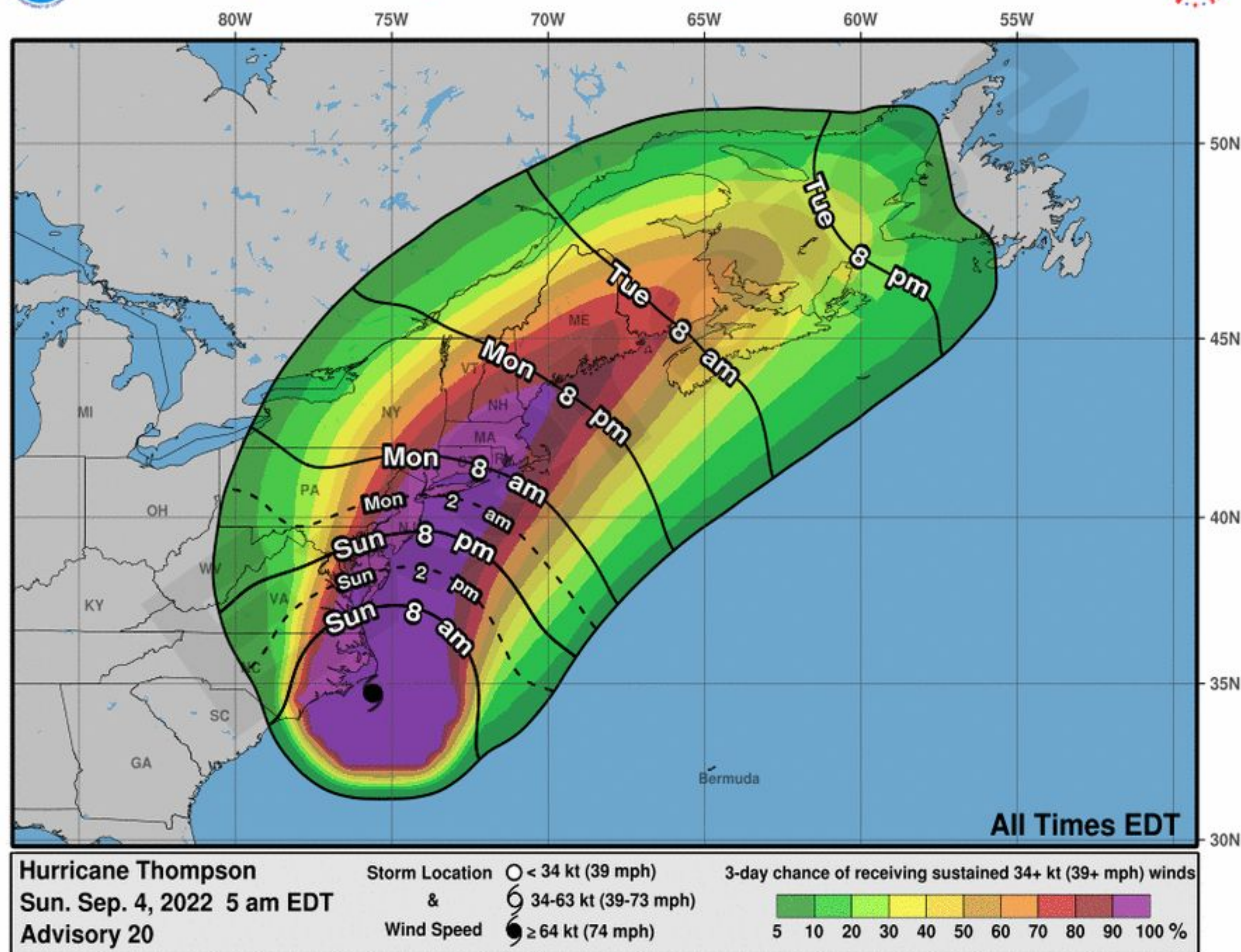


# Most Likely Time of Arrival

Hurricane Thompson



## 0-3 Day Most Likely Arrival Time of Tropical-Storm-Force Winds



- The most likely time of arrival of Tropical Storm Force Winds will be Monday morning into early afternoon.
- However, this area could see Tropical Storm Force Winds as early as late tonight, after midnight.

\*\*\*\* EXERCISE EXERCISE EXERCISE \*\*\*\*

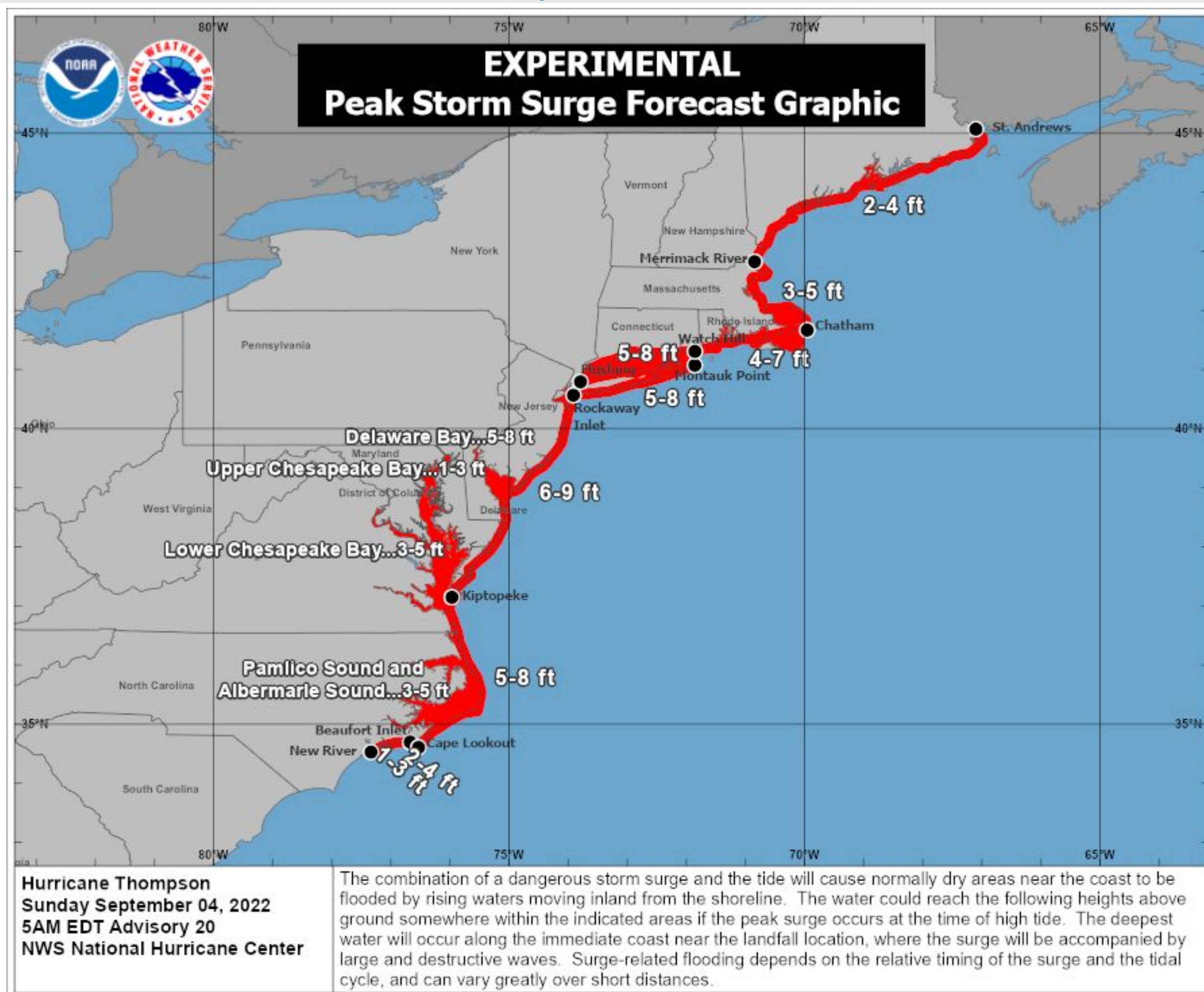
National Weather Service Boston/Norton MA





# Potential Inundation Above Ground Level

Hurricane Thompson



**Note:** This graphic shows the inundation that could occur in any one location **if peak storm surge occurs with high tide**. It depicts a reasonable worst case scenario.

## Potential Storm Surge Inundation:

- 4-8 ft inundation along portions of the south coast **if peak surge coincides with high tide**
- Some homes and businesses may be severely damaged or destroyed
- Evacuation of some neighborhoods may be necessary

High tide of concern will be late Mon/Mon evening.

- CT coast: 530 pm E to 730 pm W
- RI/MA south coast: 4-5 pm
- MA E coast: around 7 pm

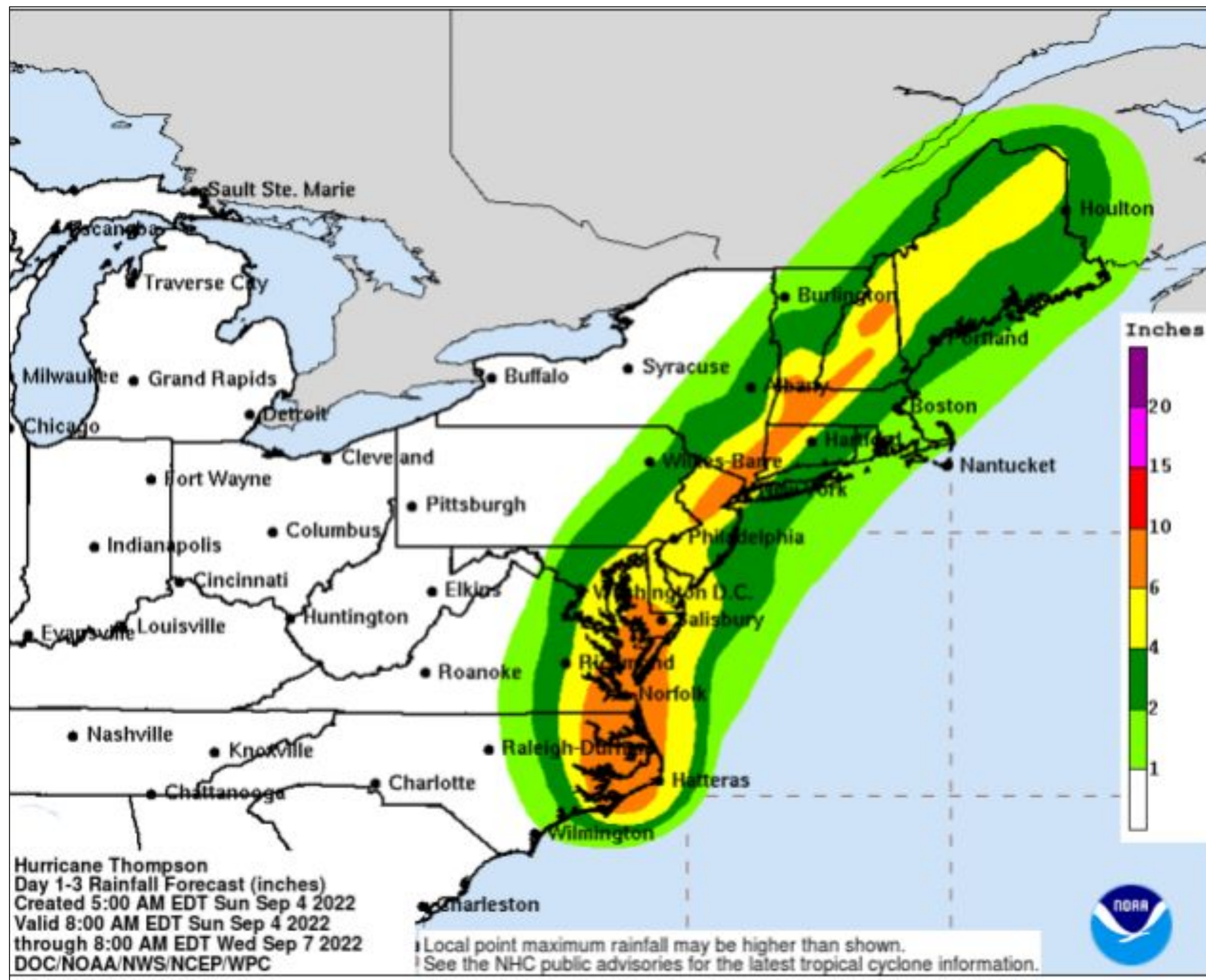




# Expected Storm Total Rainfall Through Mon Night

Hurricane Thompson

**Note: There will likely be locally higher amounts**



- 6 to 10 inches of rainfall across western MA/CT with amounts decreasing to the east
- Severe urban and small stream flash flooding and major river flooding possible
- Two periods of heavy rain
  - Today into Tonight
  - Monday into Mon night





# Flood Hazard Outlook

## Hurricane Thompson



### Hurricane Thompson 7-Day Flood Hazard Outlook (Prototype)

Includes Flash, River and Tidal Flood Hazards

NWC National Water Center

Issued: 2022-09-04 6:30 AM CDT (11:30 UTC) | Valid Through: 2022-09-11 6:30 AM CDT (11:30 UTC) | Next Issuance: 2022-09-04 4:00 PM CDT (21:00 UTC)

#### Flood Hazard Messages

- Life-threatening inundation from storm surge is occurring along the North Carolina and Mid-Atlantic coast. For more information visit [hurricanes.gov](https://hurricanes.gov).

#### Eastern North Carolina and Virginia

- Catastrophic and dangerous flash, urban and small stream flooding impacts, and widespread moderate to major river flooding are ongoing. Significant river flooding will persist through the week.

#### Mid Atlantic

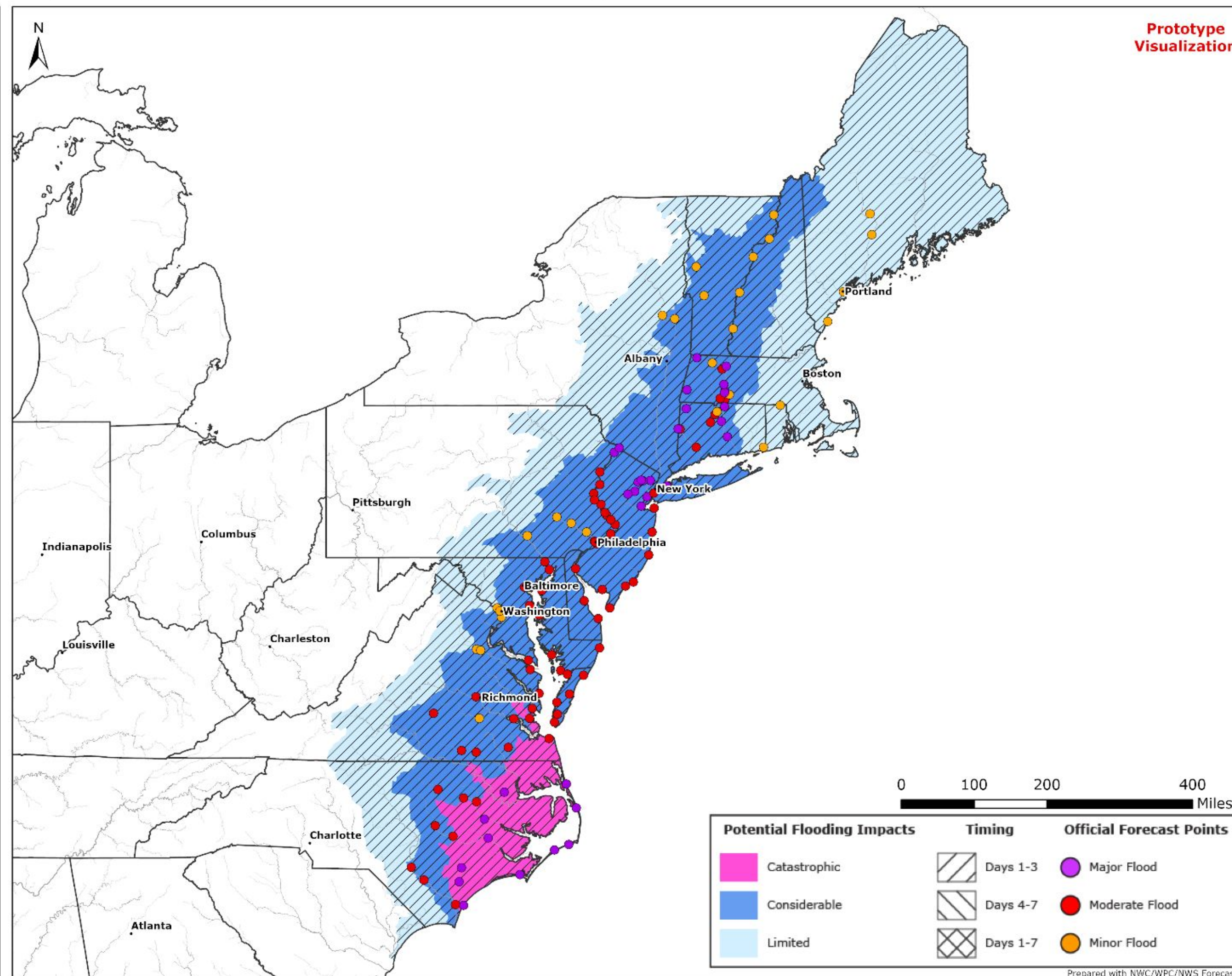
- As Thompson continues up the east coast today, widespread considerable and life-threatening flash, urban and small stream flooding impacts, and widespread moderate to major flooding are expected.

#### Northeast

- This evening, well in advance of landfall, flash and small stream flooding impacts will begin, potentially complicating last minute preparation efforts.

- Rivers are forecast to begin rising this evening, with moderate to major river flooding impacts forecast to persist into the week. River forecasts now include Thompson's forecast precipitation totals.

**Disclaimer:** This outlook provides an overview of potential flooding impacts. Please refer to detailed products issued by local National Weather Service offices for official forecasts and warnings. ([www.weather.gov](https://www.weather.gov))



About this product: [https://nws.weather.gov/products/PDD/PDD\\_PrototypeFloodHazardOutlookProduct\\_2021.pdf](https://nws.weather.gov/products/PDD/PDD_PrototypeFloodHazardOutlookProduct_2021.pdf) | To provide feedback: [https://nws.weather.gov/products/PDD/PDD\\_PrototypeFloodHazardOutlookProduct\\_2021.pdf](https://nws.weather.gov/products/PDD/PDD_PrototypeFloodHazardOutlookProduct_2021.pdf)

- Considerable Flood impacts across western MA/CT
- Includes potential for severe urban and small stream flash flooding and major river flooding





# Key Take-Aways

## Hurricane Thompson

Confidence is **HIGH** that the event will occur

Confidence is **HIGH** regarding impacts



Destructive winds resulting in significant tree and property damage with widespread power outages.



Major to life threatening storm surge flooding along the south coast.



Severe flash flooding and major river flooding, focused across western CT/MA.



A few tornadoes possible anywhere in southern New England.



Life threatening marine conditions with hurricane force winds and high seas.





# Key Messages from NHC

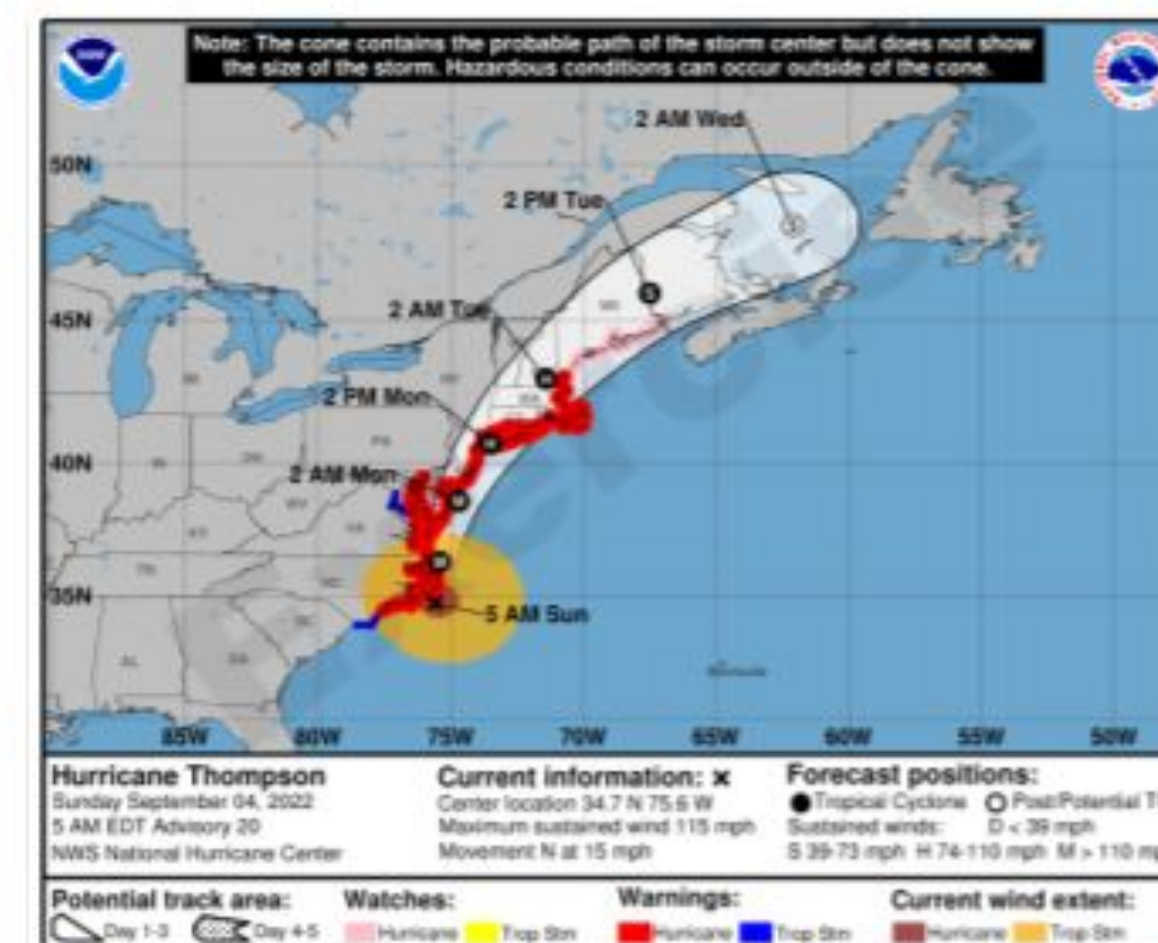


## Key Messages for Hurricane Thompson

Advisory 20: 5:00 AM EDT Sun Sep 4, 2022



1. Hurricane-force winds will continue to spread northward along the Mid-Atlantic coast within the Hurricane Warning area today and tonight. Thompson is expected to remain a dangerous major hurricane as it approaches the northeastern U.S. coast on Monday. Hurricane conditions are expected to spread northward on Monday across portions of Long Island, Connecticut, Rhode Island, Massachusetts, and New Hampshire within the Hurricane Warning area. Actions to protect life and property should be rushed to completion in the warning area.
2. There is a danger of life-threatening storm surge inundation along the Mid-Atlantic and northeastern U.S. coasts within the Storm Surge Warning area. Interests in these locations should follow any advice given by local officials.
3. Thompson is likely to produce heavy rainfall from today into early Tuesday from the Mid Atlantic into the Northeast, including the I-95 urban corridor, resulting in widespread considerable and life-threatening flooding impacts. The North Carolina and Virginia Tidewater areas are likely to experience catastrophic and dangerous flooding impacts beginning today. Flooding will also develop as early as this afternoon in parts of the Northeast, well in advance of the arrival of Thompson's center, potentially complicating last minute preparation efforts.



For more information go to [hurricanes.gov](https://hurricanes.gov)